

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

AFFYMETRIX, INC,)	
)	
Plaintiff,)	
)	
v.)	C.A. No. 04-901 (JJF)
)	
ILLUMINA, INC.)	
)	REDACTED VERSION
Defendant.)	
)	

**AFFYMETRIX'S OPPOSITION TO ILLUMINA'S MOTION
TO EXCLUDE THE EXPERT TESTIMONY OF MATTHEW LYNDE
AS IT RELATES TO LOST PROFITS**

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i.

TABLE OF CONTENTS

	<u>Page</u>
TABLE OF CITATIONS	i
SUMMARY OF ARGUMENT	1
STATEMENT OF FACTS	2
I. DR. LYNDE'S QUALIFICATIONS AS AN EXPERT	2
II. DR. LYNDE'S OPINIONS IN THIS CASE	2
ARGUMENT	8
I. THE CONTROLLING CASE LAW	8
II. DR. LYNDE'S OPINIONS CONCERNING LOST PROFITS ARE RELIABLE AND WILL ASSIST THE TRIER OF FACT.	9
A. Dr. Lynde's Analysis Of Substitute Products Is Based On The Segmentation Commonly Used To Analyze The Market.	10
B. Dr. Lynde's Calculation Of Affymetrix's Lost Sales Is Based On Well-Established Economic Principles.	11
CONCLUSION	13

ii.

TABLE OF CITATIONS

	<u>Page(s)</u>
<u>Cases</u>	
<i>Aspex Eyewear, Inc. v. E'Lite Optical, Inc.</i> , 398 CV 2996D, 2002 WL 1751381 (N.D. Tex. 2002)	9
<i>Daubert v. Merrell Dow Pharms., Inc.</i> , 509 U.S. 579 (1993)	1, 3, 8, 9
<i>Engineered Prods. Co. v. Donaldson Co., Inc.</i> , 313 F. Supp. 951 (N.D. Iowa 2004)	9, 13
<i>Gyromat Corp. v. Champion Spark Plug Co.</i> , 735 F.2d 549 (Fed. Cir. 1984)	11
<i>Kumho Tire Co. v. Carmichael</i> , 526 U.S. 137 (1999)	8
<i>Panduit Corp. v. Stahl Bros. Fibre Works, Inc.</i> , 575 F.2d 1152 (6 th Cir. 1978)	3, 11, 13
<i>State Indus., Inc. v. Mor-Flo Indus., Inc.</i> , 883 F.2d 1573 (Fed.Cir.1989)	5
<i>Ziggity Systems, Inc. v. Val Watering Systems</i> , 769 F.Supp. 752 (E.D. Pa. 1990)	12
<u>Statutes</u>	
Fed. R. Evid. Rule 702	10

1.

NATURE AND STAGE OF THE PROCEEDINGS

This case involves infringement of five Affymetrix patents covering inventions related to DNA microarrays and associated technology for use in genetic analysis. Affymetrix asserts that Illumina infringes the patents-in-suit by making and selling microarrays and related products. As compensation for Illumina's infringement, Affymetrix seeks damages in the form of lost profits from lost sales and a reasonable royalty. Trial on the issues of infringement and damages is set to commence on March 5, 2007.

Illumina moved to preclude Affymetrix's economics expert, Matthew Lynde, from testifying as to Affymetrix's lost profits based on Illumina's disagreement with Dr. Lynde's methodology in making his calculations. Affymetrix opposes that motion.

SUMMARY OF ARGUMENT

The lost profits inquiry involves an economic analysis of what would have happened in the market "but for" Illumina's infringement. Dr. Lynde is well-qualified to offer his opinions as to lost profits and the "but for" economic inquiry. He has a Ph.D. in economics and more than 20 years of experience working as a practicing applied economist for the government, academia and business. Dr. Lynde is also familiar with and has performed lost profits analyses pursuant to the guidelines set forth in the Federal Circuit's precedent.

Dr. Lynde's proffered opinion testimony here is consistent with the guidelines announced by the Supreme Court in the *Daubert* case and with the lost profits analyses adopted by the Federal Circuit. Dr. Lynde's opinions will assist the trier of fact in understanding the economic harm to Affymetrix caused by Illumina's infringement. The bases for his opinions are set out in a 74-page expert report (not including the exhibits detailing his calculations) which includes his analysis of the relevant economic and market factors under the pertinent case law.

2.

(Attached with exhibits as Exh. A). His report also includes citations to third party analyst and economist reports illustrating how the market for DNA microarrays is analyzed, and the acceptance of the economic model Dr. Lynde used in his analyses.

Illumina's complaints that Dr. Lynde's analyses are "flawed" and "unreliable" amount to no more than Illumina's disagreement with his conclusions. Indeed, Illumina offers no support for its assertions – other than its conclusory statements – and it ignores the rationale for the methodology that is set forth in Dr. Lynde's report. Disagreement with an expert's opinions, however, is dealt with through cross examination – not preclusion.

STATEMENT OF FACTS

I. DR. LYNDE'S QUALIFICATIONS AS AN EXPERT

Dr. Lynde is an economist and a Vice President of Cornerstone Research, an economic and financial consulting firm with offices in Menlo Park, San Francisco and Los Angeles, California; Boston, Massachusetts; Washington, D.C. and New York, New York. Dr. Lynde holds a Ph.D. in economics and has more than 20 years of experience as a practicing applied economist for the government, academia and business. He specializes in applied economic, financial and statistical analysis of complex business matters – including as involves the calculation of damages in intellectual property disputes. He has offered opinions on lost profits damages in federal courts many times.

II. DR. LYNDE'S OPINIONS IN THIS CASE

Dr. Lynde has opined as to the total amount of damages appropriate to compensate Affymetrix for Illumina's infringement. His calculated damages include both a reasonable royalty analysis and lost profits for lost sales. The bases for all of his opinions are set forth in his report and were further explained at his deposition.

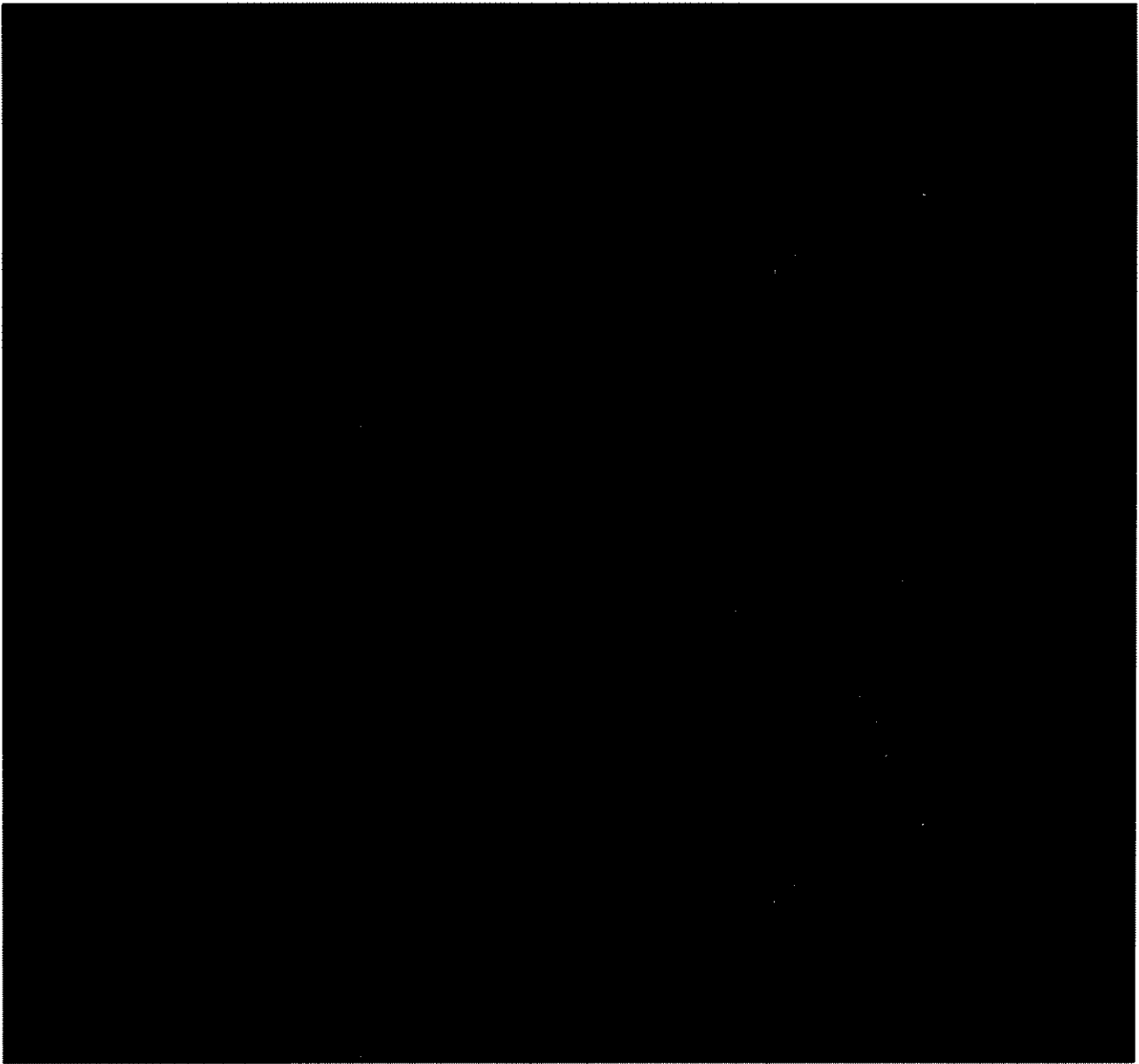
3.

Dr. Lynde's lost profits analysis follows the four-part test set out in *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1156 (6th Cir. 1978). Dr. Lynde's report addresses 1) demand for the patented product or feature; 2) availability of non-infringing substitutes; 3) manufacturing and marketing capacity to exploit the demand and 4) the ability to calculate the amount of profit Affymetrix would have made but for Illumina's infringing sale. See Exh. A, Expert Report on Patent Damages of Matthew R. Lynde, Ph.D. at ¶ 34) ("Lynde Rept.").

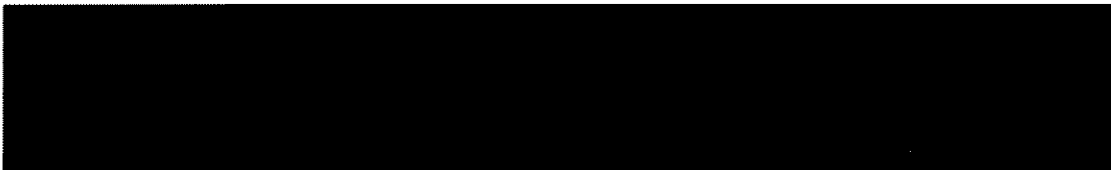
Illumina has not raised a *Daubert* challenge with respect to Dr. Lynde's opinions as to the first three Panduit factors. [REDACTED]

[REDACTED]

4.



¹



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See Exh. B, UBS Rept. at 18; Exh. C, Infinium Rept. at 3-5.



5.



3



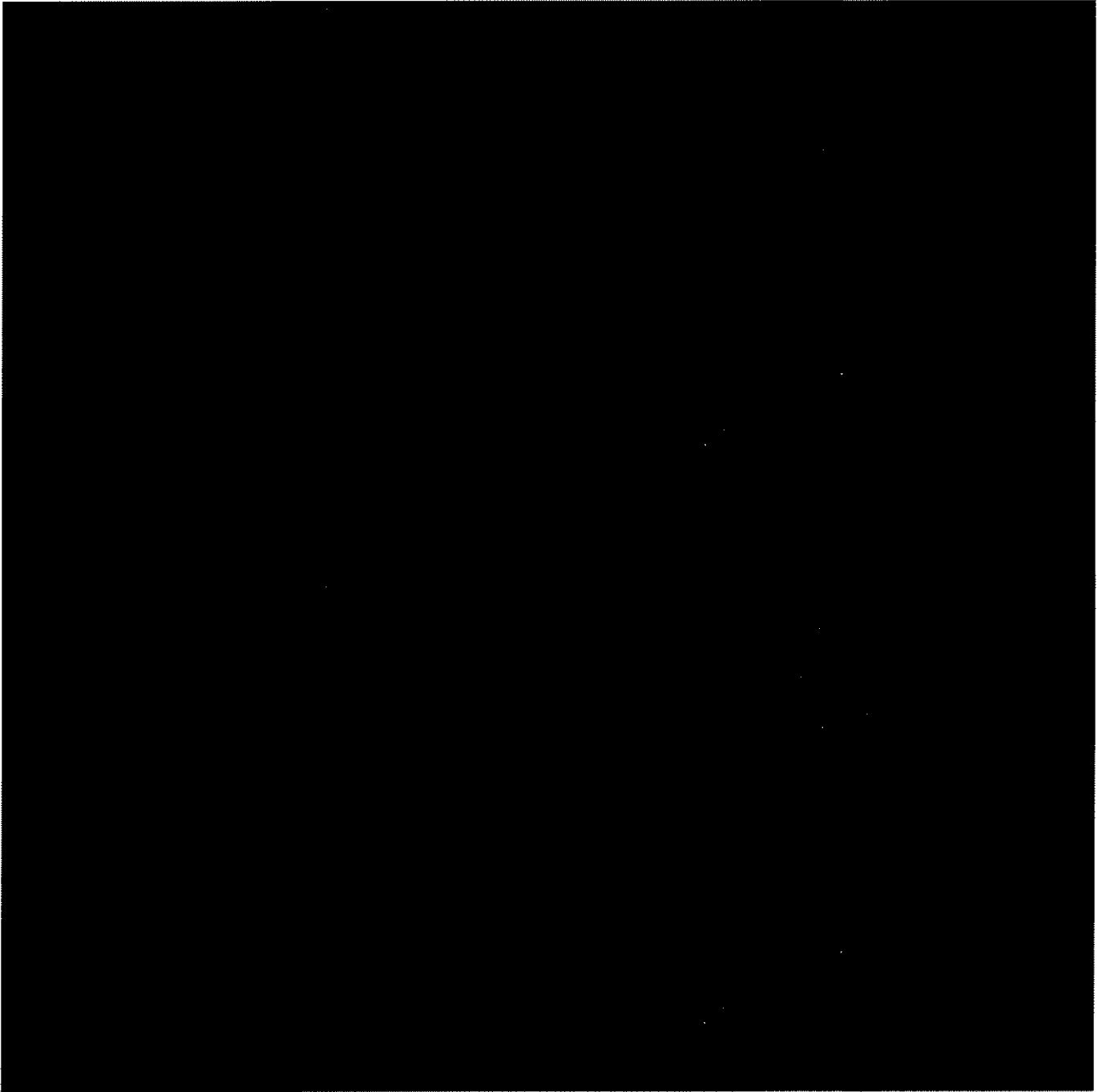
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See State Indus., Inc. v. Mor-Flo Indus., Inc., 883 F.2d 1573, 1578 (Fed.Cir.1989)

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State Indus., 883 F.2d at 1578.

6.



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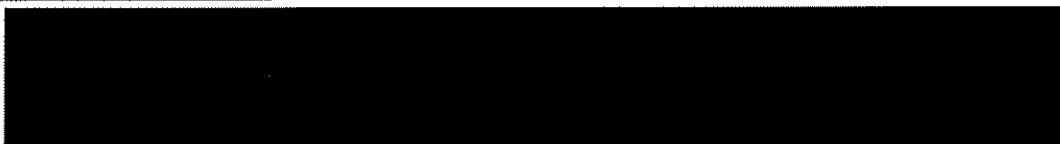


7.



The proportional substitution model Dr. Lynde used in apportioning Illumina's infringing revenues between Affymetrix and other rival firms is based on a property that economists refer to as "independence from irrelevant alternatives" ("IIA"). As recognized by Train in the cited "Discrete Choice Methods with Simulation" text, "[i]n many settings, choice probabilities that exhibit IIA provide an accurate representation of reality. In fact, Luce (1959) considered IIA to be a property of appropriately specified choice probabilities." Exh. D, Train at 50. Using this accepted economic approach, Dr. Lynde was able to analyze how the market would have looked in the absence of Illumina's infringing sales and what amount of lost profits Affymetrix suffered as a result of those sales.⁷

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8.

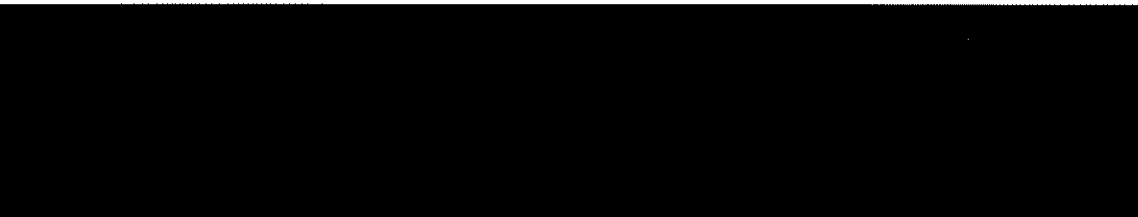
ARGUMENT

I. THE CONTROLLING CASE LAW

Rule 702, Fed. R. Evid., governing expert testimony, provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

In *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993), the Supreme Court provided the analytical framework for determining the admissibility of expert testimony under Rule 702. In *Daubert*, 509 U.S. at 593-94, the Supreme Court set out non-exclusive factors that the district courts may consider in assessing the admissibility of expert testimony.⁸ Those factors “may or may not be pertinent in assessing reliability, depending on the nature of the issue, the expert’s particular expertise, and the subject of the testimony.” *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 141-42, 151 (1999). Thus, the *Daubert* inquiry is “a flexible one” and the district court has broad latitude in deciding whether an expert’s testimony has sufficient reliability for it to be admitted. *Id.* at 150.



⁸ The factors include 1) whether the expert’s technique can be or has been tested; 2) whether the method has been subjected to peer review and publication; 3) the known or potential rate of error of a technique or theory when applied; 4) the existence and maintenance of standards and controls; and 5) the degree to which the technique or theory has been generally accepted in the scientific community.

It is inappropriate to preclude a damages expert from testifying when his opinions are based on fundamental or widely-accepted econometric methods. *See, e.g., Engineered Prods. Co. v. Donaldson Co., Inc.*, 313 F. Supp. 951, 1011 (N.D. Iowa 2004) (denying *Daubert* motion, noting “[a]lthough Donaldson is clearly unhappy with Mr. Burton's conclusions, and has cloaked that unhappiness in challenges to “reasoning and methodology,” the court finds that EPC has adequately supported Mr. Burton's reasoning and methodology to warrant submission of his opinions to a jury.”); *Aspex Eyewear, Inc. v. E'Lite Optical, Inc.*, 398 CV 2996D, 2002 WL 1751381, *35-37 (N.D. Tex. 2002) (denying *Daubert* motion to exclude lost profits testimony, finding “Dr. Stewart's methodology is sufficiently reliable to be admissible. Although E'Lite devotes considerable attention to detailing specific problems it has with Dr. Stewart's analysis of potential substitutes, these concerns relate to the weight to be afforded his trial testimony. The court denies E'Lite's motion to strike Dr. Stewart's damages evidence.”).

II. DR. LYNDE'S OPINIONS CONCERNING LOST PROFITS ARE RELIABLE AND WILL ASSIST THE TRIER OF FACT.

Illumina does not dispute Dr. Lynde's qualifications to offer opinions as to lost profits. Instead, Illumina asserts (pp. 6-10) that Dr. Lynde's testimony will not help the trier of fact because it is “flawed” and unreliable. Illumina's assertions are based on two primary complaints: 1) that Dr. Lynde's opinions are based on the assumption that Affymetrix would have sold “something” that is undefined in place of each Illumina sale and 2) that Dr. Lynde calculated the amount of lost profits by simply “applying Affymetrix's margins to Illumina's revenues.” Neither of Illumina's assertions is correct, and neither calls for preclusion of Dr. Lynde's testimony.

10.

**A. Dr. Lynde's Analysis Of Substitute Products Is Based
On The Segmentation Commonly Used To Analyze The
Market.**

Illumina incorrectly asserts

[REDACTED]

[REDACTED]

[REDACTED]

11.

infringing sale. Illumina, however, cites no law suggesting that such specificity is required under the Federal Circuit's *Panduit* analysis for lost profits. And no such requirement exists. Illumina's complaint is essentially that Dr. Lynde did not provide the name or product number of a specific Affymetrix product that would have been sold absent Illumina's infringing sale. Illumina, however, cites no law suggesting that such specificity is required under the Federal Circuit's *Panduit* analysis for lost profits. And no such requirement exists. *See, e.g., Gyromat Corp. v. Champion Spark Plug Co.*, 735 F.2d 549 (Fed. Cir. 1984) (upholding an award of lost profits for infringing paint sprayers, which were not identified by product name or number, but rather by their characteristics – short stroke systems and long stroke systems.)

Dr. Lynde's identification of Affymetrix products by product characteristics is supported by the reports of market analysts and is consistent with the Federal Circuit precedent. Illumina has offered no basis for preclusion of his testimony.

**B. Dr. Lynde's Calculation Of Affymetrix's Lost Sales Is
Based On Well-Established Economic Principles.**

Illumina also incorrectly asserts that Dr. Lynde simply applied "Affymetrix's margins to Illumina's revenues" in coming up with his lost profits numbers. [REDACTED]

[REDACTED]

12.

[REDACTED]

As discussed above, Dr. Lynde's lost profits calculation was not speculative or unreliable. Instead, it was based on a well-accepted approach for modeling scenarios where issues involving choice are being studied.¹⁰ [REDACTED]

[REDACTED]

Indeed, a similar approach was accepted in *Ziggity Systems, Inc. v. Val Watering Systems*, 769 F.Supp. 752, 823 (E.D. Pa. 1990). There, the technology at issue involved poultry drinking systems. The court noted that "Ziggity and defendants actually sell their products at different prices and with different recommended accessory and component configurations. Thus, **in order to determine the sales revenue Ziggity would have received from defendants' nipple sales, it is necessary to look at the actual quantity of infringing nipple drinkers sold**

¹⁰ See Exh. D, Train at 49-52; see also Exh. G, Gregory J. Werden, Luke M. Froeb, and James Langenfeld, "Lost Profits from Patent Infringement: The Simulation Approach," *International Journal of the Economics of Business*, Vol. 7, No. 2, 2000, pp. 213-227.

13.

by defendants. Then, by multiplying that sales revenue by Ziggity's incremental profit at that time, you arrive at the profit revenues lost with those sales.” (Emphasis added).

Dr. Lynde's opinions regarding lost profits are in accord with the *Panduit* factors set forth by the Federal Circuit for analyzing entitlement to lost profits. The bases of his opinions are not speculative or unreliable, but rather are supported by the characteristics of the products and the specific markets in which they are sold, as well as fundamental econometric modeling principals set up to study choice. There is thus no basis to preclude his testimony. *See Engineered Prods.*, 313 F. Supp. at 1011.

Moreover, there is nothing inherently unreliable in Dr. Lynde's lost profits analysis. Indeed, Illumina offers no support – legal or technical – for its arguments. Instead, Illumina essentially asserts that it disagrees with Dr. Lynde's analysis of the market and his opinion. Illumina's disagreements with Dr. Lynde's analysis and opinions may be appropriate for cross-examination and presentation of contrary evidence. But they have nothing to do with the admissibility of his testimony.

CONCLUSION

Affymetrix respectfully requests that the Court deny Illumina's motion to preclude the testimony of Dr. Lynde.

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CERTIFICATE OF SERVICE

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